

Contents

VOLUME 25, NUMBER 1, FEBRUARY 2000

Published 28 January 2000

M. BEEKMAN and P. VAN STRATUM

Does the diapause experience of bumblebee queens
Bombus terrestris affect colony characteristics? 1–6

TIMOTHY P. CRAIG, JOANNE K. ITAMI,
CATHLEEN SHANTZ, WARREN G. ABRAHAMSON,
JOHN D. HORNER and JAMES V. CRAIG
The influence of host plant variation and intraspecific competition on oviposition preference and offspring performance in the host races of *Eurosta solidaginis* 7–18

JAMES E. CRESSWELL

A comparison of bumblebees' movements in uniform and aggregated distributions of their forage plant 19–25

J. M. ELLIOTT

Contrasting diel activity and feeding patterns of four species of carnivorous stoneflies 26–34

TERRENCE D. FITZGERALD and
DESSIE L. A. UNDERWOOD

Winter foraging patterns and voluntary hypothermia in the social caterpillar *Euchaetes socialis* 35–44

SÖNKE HARDERSEN

The role of behavioural ecology of damselflies in the use of fluctuating asymmetry as a bioindicator of water pollution 45–53

MICHAEL R. MAXWELL

Does a single meal affect female reproductive output in the sexually cannibalistic praying mantid *Iris oratoria*? 54–62

MIKAEL MÜNSTER-SWENDSEN and
ISABEL CALABUIG

Interaction between the solitary bee *Chelostoma florisomne* and its nest parasite *Sapyga clavicornis* – empty cells reduce the impact of parasites 63–70

C. S. S. PIRES, P. W. PRICE and E. G. FONTES
Preference–performance linkage in the neotropical spittlebug *Deois flavopicta*, and its relation to the Phylogenetic Constraints Hypothesis 71–80

HANS-PETER RUSTERHOLZ and ANDREAS ERHARDT
Can nectar properties explain sex-specific flower preferences in the Adonis Blue butterfly *Lysandra bellargus*? 81–90

H. SADEGHI and F. GILBERT

Oviposition preferences of aphidophagous hoverflies 91–100

H. SADEGHI and F. GILBERT

The effect of egg load and host deprivation on oviposition behaviour in aphidophagous hoverflies 101–108

TODD E. SHELLY

Flower-feeding affects mating performance in male oriental fruit flies *Bactrocera dorsalis* 109–114

Short Communication

ZHIYUN JIA, ZHIGANG JIANG and
SCOTT K. SAKALUK

Nutritional condition influences investment by male katydids in nuptial food gifts 115–118

New Perspectives

PETER TURCHIN and ALAN A. BERRYMAN
Detecting cycles and delayed density dependence: a comment of Hunter and Price (1998) 119–121

MARK D. HUNTER and PETER W. PRICE

Detecting cycles and delayed density dependence: a reply to Turchin and Berryman 122–124

VOLUME 25, NUMBER 2, MAY 2000

Published 25 April 2000

SONIA M. ALTIZER, KAREN S. OBERHAUSER and
LINCOLN P. BROWER

Associations between host migration and the prevalence of a protozoan parasite in natural populations of adult monarch butterflies 125–139

MICKY D. EUBANKS and ROBERT F. DENNO
Health food versus fast food: the effects of prey quality and mobility on prey selection by a generalist predator and indirect interactions among prey species 140–146

FARID FARAJI, ARNE JANSEN,
PAUL C. J. VAN RIJN and MAURICE W. SABELIS
Kin recognition by the predatory mite *Iphiseius degenerans*: discrimination among own, conspecific, and heterospecific eggs 147–155

JEFFREY G. FIDGEN, ELDON S. EVELEIGH and
DAN T. QUIRING

Influence of host size on oviposition behaviour and fitness of *Elachertus cacoeciae* attacking a low-density population of spruce budworm *Choristoneura fumiferana* larvae 156–164

DAVID GUTIÉRREZ and CHRIS D. THOMAS
Marginal range expansion in a host-limited butterfly species *Gonepteryx rhamni* 165–170

NATHAN P. HAVILL and KENNETH F. RAFFA
Compound effects of induced plant responses on insect herbivores and parasitoids: implications for tritrophic interactions 171–179

W. WYATT HOBACK, DOUGLAS A. GOLICK,
TINA M. SVATOS, STEPHEN M. SPOMER and
LEON G. HIGLEY
Salinity and shade preferences result in ovipositional differences between sympatric tiger beetle species 180–187

H. MOHD NOROWI, JOE N. PERRY, W. POWELL and K. RENNOLLS
The effect of spatial scale on interactions between two weevils and their parasitoid 188–196

TOD L. OSIER, SHAW-Y. HWANG and
RICHARD L. LINDROTH
Effects of phytochemical variation in quaking aspen *Populus tremuloides* clones on gypsy moth *Lymantria dispar* performance in the field and laboratory 197–207

K. SCHÖNROGGE, P. WALKER and M. J. CRAWLEY
Parasitoid and inquiline attack in the galls of four alien, cynipid gall wasps: host switches and the effect on parasitoid sex ratios 208–219

BIRGITTA S. TULLBERG, GABRIELLA GAMBERALE-STILLE and CHRISTER SOLBRECK
Effects of food plant and group size on predator defence: differences between two co-occurring aposematic Lygaeinae bugs 220–225

PHILIP J. WRIGHT, ROBERT BONSER and
UCHEGBU O. CHUKWU
The size–distance relationship in the wood ant *Formica rufa* 226–233

Short Communication

MICHAEL E. N. MAJERUS and
TAMSIN M. O. MAJERUS
Female-biased sex ratio due to male-killing in the Japanese ladybird *Coccinula sinensis* 234–238

Critical Appraisal

NATALIA SOKOLOVSKA, LOCKE ROWE and
FRANK JOHANSSON
Fitness and body size in mature odonates 239–248

VOLUME 25, NUMBER 3, AUGUST 2000

Published 2 August 2000

JAMES E. CRESSWELL, JULIET L. OSBORNE and
DAVID GOULSON

An economic model of the limits to foraging range in central place foragers with numerical solutions for bumblebees 249–255

A. E. DOUGLAS
Reproductive diapause and the bacterial symbiosis in the sycamore aphid *Drepanosiphum platanoidis* 256–261

ANNE-KATRIN EGGERT and SCOTT K. SAKALUK
Benefits of communal breeding in burying beetles: a field experiment 262–266

JEFFREY A. HARVEY
Dynamic effects of parasitism by an endoparasitoid wasp on the development of two host species: implications for host quality and parasitoid fitness 267–278

ROY KASPI, PHILLIP W. TAYLOR and
BOAZ YUVAL
Diet and size influence sexual advertisement and copulatory success of males in Mediterranean fruit fly leks 279–284

JORGE L. LEÓN-CORTÉS, MATTHEW J. R. COWLEY and CHRIS D. THOMAS
The distribution and decline of a widespread butterfly *Lycaena phlaeas* in a pastoral landscape 285–294

J. D. MAJER, H. F. RECHER and S. GANESH
Diversity patterns of eucalypt canopy arthropods in eastern and western Australia 295–306

J. P. MICHAUD and B. BELLIURE
Consequences of foundress aggregation in the brown citrus aphid *Toxoptera citricida* 307–314

N. J. MILLS and U. KUHLMANN
The relationship between egg load and fecundity among *Trichogramma* parasitoids 315–324

DANIEL C. MOON, ANTHONY M. ROSSI and
PETER STILING
The effects of abiotically induced changes in host plant quality (and morphology) on a salt marsh planthopper and its parasitoid 325–331

SHELLEE A. MOREHEAD and
DONALD H. FEENER JR
An experimental test of potential host range in the ant parasitoid *Apocephalus paraponerae* 332–340

T. MURAKAMI, L. WANG and S. HIGASHI
Mating frequency, genetic structure, and sex ratio in the intermorph female producing ant species *Myrmecina nipponica* 341–347

BARBARA A. RICHARDSON, CAROL ROGERS and M. J. RICHARDSON
Nutrients, diversity, and community structure of two phytotelm systems in a lower montane forest, Puerto Rico 348–356

NICOLA J. SEAL
The effect of sperm storage and timing of mating on offspring sex ratios in the yellow dung fly *Scatophaga stercoraria* 357–361

Short Communication

JAMES E. CRESSWELL
Resource input and the community structure of larval infaunas of an eastern tropical pitcher plant *Nepenthes bicalcarata* 362–366

New Perspectives

SARAH J. RICHARDSON, SUSAN E. HARTLEY and MALCOLM C. PRESS
Climate warming experiments: are tents a potential barrier to interpretation? 367–370

VOLUME 25, NUMBER 4, NOVEMBER 2000

Published 1 November 2000

Editorial

SIMON R. LEATHER
Ecological Entomology – leading ecology into the 21st century? Twenty-five years of excellence in perspective 371–373

PEDRO BARBOSA, ALEJANDRO SEGARRA and PAUL GROSS
Structure of two macrolepidopteran assemblages on *Salix nigra* (Marsh) and *Acer negundo* L.: abundance, diversity, richness, and persistence of scarce species 374–379

D. R. GILLESPIE and R. R. McGREGOR
The functions of plant feeding in the omnivorous predator *Dicyphus hesperus*: water places limits on predation 380–386

ALLY R. HARARI, DAVID BEN-YAKIR and DAVID ROSEN
Male pioneering as a mating strategy: the case of the beetle *Maladera matrida* 387–394

JOHN JAENIKE
Effectively vertical transmission of a *Drosophila*-parasitic nematode: mechanism and consequences 395–402

ROBERT A. JOHNSON
Habitat segregation based on soil texture and body size in the seed-harvester ants *Pogonomyrmex rugosus* and *P. barbatus* 403–412

RIEK DEKKER VAN KLINKEN
Host-specificity constrains evolutionary host change in the psyllid *Prosopidopsylla flava* 413–422

BONNIE JEAN MCNETT and ANN LUNDIE RYPSTRA
Habitat selection in a large orb-weaving spider: vegetational complexity determines site selection and distribution 423–432

LLOYD W. MORRISON, ELIZABETH A. KAWAZOE, RODNEY GUERRA and LAWRENCE E. GILBERT
Ecological interactions of *Pseudacteon* parasitoids and *Solenopsis* ant hosts: environmental correlates of activity and effects on competitive hierarchies 433–444

VOJTECH NOVOTNY and OLIVIER MISSA
Local versus regional species richness in tropical insects: one lowland site compared with the island of New Guinea 445–451

KENICHI OZAKI
Insect–plant interactions among gall size determinants of adelgids 452–459

BARBARA A. RICHARDSON and GILLIAN A. HULL
Insect colonisation sequences in bracts of *Heliconia caribaea* in Puerto Rico 460–466

ANA RIVERO
The relationship between host selection behaviour and offspring fitness in a koinobiont parasitoid 467–472

PETER SCHAUSBERGER and BRIAN A. CROFT
Nutritional benefits of intraguild predation and cannibalism among generalist and specialist phytoseiid mites 473–480

JAMIE E. SEYMOUR and RHONDDA E. JONES
Humidity-terminated diapause in the tropical braconid parasitoid *Microplytis demolitor* 481–485

NANCY E. STAMP and M. DEANE BOWERS
Foraging behaviour of caterpillars given a choice of plant genotypes in the presence of insect predators 486–492

Short Communication

ANURAG A. AGRAWAL and RAMANA G. COLFER
Consequences of thrips-infested plants for attraction of conspecifics and parasitoids 493–496

Book Review 497